BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

FILED
10-31-16
04:59 PM

Application of Pacific Gas and Electric Company in its 2015 Nuclear Decommissioning Cost Triennial Proceeding (U39E).	Application 16-03-006 (Filed March 1, 2016)

REPLY BRIEF OF THE UTILITY REFORM NETWORK

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October 31, 2016

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REPLY BRIEF OF THE UTILITY REFORM NETWORK

Pursuant to Rule 13.11 of the Rules of Practice and Procedure, The Utility Reform Network (TURN) submits this reply brief on the Decommissioning Cost Estimates (DCEs) and revenue requirement assumptions for Diablo Canyon and Humboldt Bay Nuclear Power Plant. In this reply brief, TURN responds to the opening brief of Pacific Gas & Electric (PG&E) on issues within the scope of the current Nuclear Decommissioning Cost Triennial Proceeding (NDCTP).

I. DIABLO CANYON DECOMMISSIONING COST ESTIMATE

PG&E's opening brief urges the Commission to reject any adjustments to the Diablo Canyon estimate proposed by TURN. After offering a defense of its proposed estimate, PG&E asserts that TURN failed to challenge any "specific assumptions" with respect to Diablo Canyon license termination costs and instead relied exclusively on high-level comparisons with estimates for other nuclear plants outside California.[1] According to PG&E, TURN's adjustments should be ignored because they are not based on a review of any "specific cost components and assumptions contained in the TLG Diablo Canyon cost study."[2]

PG&E's description of TURN's participation in this proceeding bears little resemblance to reality. TURN's opening brief describes a variety of concerns with specific cost components and assumptions in the TLG study for license termination. These concerns include the following:

- PG&E's failure to satisfy its burden of proof to demonstrate the reasonableness of a $344 million increase for site security costs.[3]

[1] PG&E opening brief, page 10.
[2] PG&E opening brief, page 11.
[3] TURN opening brief, pages 25-28.

• PG&E's failure to satisfy its burden of proof to demonstrate the reasonableness of a $311 million increase for Utility and DOC staff costs.[4]

• PG&E's failure to adequately justify a $492 million increase in the cost of large component removal.[5]

• PG&E's failure to justify the assumed use of "rip and ship" for all building structures on the Diablo Canyon site.[6]

• PG&E's unreasonable determination that all clean (uncontaminated) construction debris would be transported to a Utah landfill for disposal, a new assumption that increases the cost estimate by at least $312 million.[7]

• PG&E's unreasonable assumption that fuel must remain in wet pool storage for at least 10 years after the plant shuts down at a cost of $65 million per year.[8]

For many of these issues, TURN noted PG&E's failure to explain the basis for cost increases, document the changed inputs that led to such extreme increases, explain the exact delta between the current estimate and the 2012 approved study, or justify the reasonableness of changed assumptions. TURN's brief offers critiques by referencing the TLG study, PG&E's own testimony, Commission precedents and relevant law.

PG&E asks the Commission to find that the Diablo DCE is reasonable, in part, because it "uses the same unit cost methodology which the Commission has

[4] TURN opening brief, pages 28-30.
[5] PG&E opening brief, pages 31-36.
[6] TURN opening brief, pages 36-37.
[7] TURN opening brief, pages 38-43.
[8] TURN opening brief, pages 45-49.

approved in previous NDCTPs."[9] PG&E also urges the Commission to give deference to the study because it "was developed by TLG, a nationally known specialist in the field of developing nuclear decommissioning estimates".[10] Although TURN does not dispute that the "unit cost methodology" has been used in prior estimates, this fact is not relevant to the consideration of TURN's critiques. TURN does not take issue with the methodological approach applied by TLG but rather with the specific input assumptions provided by PG&E that are driving the questionable increases in costs.[11] TLG was not responsible for reviewing the reasonableness of the assumptions provided by PG&E but was instead tasked to ensure that the cost estimation model incorporated these changes and that the resulting calculations were mathematically correct. Key changes to the overall cost estimate are the result of explicit direction provided by PG&E and were not a result of TLG's recommendations.

PG&E criticizes TURN's comparison of Diablo Canyon to a large number of comparable nuclear plants across the country by suggesting the exclusion of certain facilities renders the entire exercise irrelevant.[12] Specifically, PG&E expresses concern that the recently approved cost estimate for Units 2 and 3 at the San Onofre Nuclear Generating Station (SONGS) was not included in the list of comparison units.[13] PG&E also incorrectly asserts that TURN's entire proposal for adjustments to the Diablo Canyon estimate is tied exclusively to the entire cost of decommissioning at Byron and Braidwood.[14] Finally, PG&E criticizes TURN for excluding the Zion facility from the list of comparison plants despite the fact that there is no available public estimate.[15]

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[9] PG&E opening brief, page 4.
[10] PG&E opening brief, pages 11-12.
[11] TURN opening brief, pages 11, 15, 18, 26, 27, 29, 31, 32, 33, 38, 45, 48.
[12] PG&E opening brief, page 12.
[13] PG&E opening brief, page 12.
[14] PG&E opening brief, pages 12-13.
[15] PG&E opening brief, page 12.

TURN's opening brief explains that the comparison performed by witness Bruce Lacy is intended to alert the Commission to the increasing divergence over time between the costs estimated for License Termination at Diablo Canyon and those included in License Termination estimates for other comparable facilities around the country.[16] This information is relevant because it allows the Commission to take into account recent experience from other similar facilities around the country and to better understand what may be driving different cost outcomes for California facilities. TURN is not asking the Commission to adopt specific adjustments to the overall Diablo cost estimate based on this comparison but instead to conclude that higher scrutiny should be applied to questionable assumptions proposed by PG&E that contribute to a widening differential.

TURN explained that the SONGS estimate was performed by a different vendor (EnergySolutions), making direct comparisons to the TLG estimate challenging, and noted that PG&E failed to satisfy its obligation to provide a side-by-side comparison of cost inputs and assumptions at Diablo Canyon and SONGS despite a Commission directive in D.14-12-082 to include this type of information in the Common Summary Format.[17] With respect to the relevance of the Byron and Braidwood estimates, TURN pointed to the estimated cost of large component removal at these facilities to highlight the questionable nature of PG&E's assumed spike in costs for this same scope of work at Diablo Canyon and to support the recommended reduction in the assumed duration of wet fuel storage.[18] Contrary to PG&E's assertions, TURN did not rely upon the Byron and Braidwood estimates for purposes of proposing any other specific adjustments to the Diablo Canyon cost estimate.

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[16] TURN opening brief, pages 17-23.
[17] TURN opening brief, pages 66-68.
[18] TURN opening brief, pages 34-36, 47. Byron and Braidwood have a very similar design to Diablo Canyon and are owned by Exelon, the original owner and operator of the Zion plant that PG&E cites as the basis for increases to the large component removal portion of the Diablo cost estimate.

With respect to the inclusion of Zion, TURN's opening brief demonstrates that there is little public information available about the costs of decommissioning that facility and notes TLG expert Seymore agreed that it would be difficult, if not impossible, to draw any conclusions about overall costs based on information available at this point in time.[19] If PG&E believed that TURN should have included a complete cost estimate for Zion in its analysis, the relevant information should have been (but was not) included in PG&E's rebuttal testimony. The fact that PG&E cannot point to any publicly-available materials that describe the total costs at Zion demonstrates the impossibility of TURN acquiring a complete cost estimate for this facility for inclusion in any analysis.

TURN urges the Commission to find that massive cost deviations from a group of comparison plants should be justified with specific evidence to support the assumptions that drive these differences. In many cases, PG&E simply asks the Commission to accept huge cost increases with minimal description, few identified changes to specific inputs, and no ability for the Commission to calculate the impact of such changes or assess whether the higher costs are tied to assumptions manufactured by PG&E management for the sole purpose of driving up the overall estimate.

A. Security costs

PG&E proposes to increase site security costs by $344 million to $687 million, a doubling of the $343 million included in the previously adopted estimate.[20] PG&E's opening brief references the slim materials provided in direct testimony to describe the rationale for $687 million in site security costs.[21] Nowhere in the brief does PG&E ever identity the amount of costs proposed for site security or

[19] TURN opening brief, pages 32-33.
[20] Ex. 2, page 2-29, Table 1. Both figures are in $2014.
[21] PG&E opening brief, pages 6-8.

explain the basis for the doubling in expected costs relative to the 2012 approved estimate. This omission is consistent with the inadequate presentation of this issue in testimony and the lack of support for a doubling of this portion of the cost estimate.

PG&E suggests that the security costs are driven by the "NRC Safeguard requirements" but fails to explain that there is no basis for finding that the specific security cost increases at Diablo Canyon are required by federal regulations. In fact, the NRC leaves substantial discretion to the licensee to develop security plans and does not review the reasonableness of spending on this function. This Commission is the only agency charged with assessing whether the forecasted spending is unreasonably high. Moreover, PG&E did not present any evidence to suggest that massive increases in security costs purportedly driven by NRC requirements have been similarly incorporated into the estimates of other NRC-licensed nuclear facilities. As pointed out in TURN's testimony, PG&E's cost estimate for Diablo Canyon is an outlier relative to other similar plants across the country subject to the same NRC requirements.

The security increases in the current estimate are a product of PG&E's internal determinations and have not been subject to independent review or explained with sufficient specificity to allow the Commission to determine the basis for the doubling of costs. These were specific flaws with PG&E's showing in the 2012 NDCTP that led to the rejection of $107.7 million in proposed security costs.[22] Despite the admonition by the Commission in that decision, PG&E offers thin record evidence that would permit the Commission to find that these deficiencies have been remedied in the current application.

PG&E points to the fact that the revised security costs were provided to two

[22] D.14-12-082, pages 100-101.

PG&E managers so they could "independently" verify the assumptions. TURN does not believe that a review by two PG&E managers satisfies the Commission's explicit finding in the 2012 NDCTP that it is not reasonable "to rely on PG&E's security personnel to estimate future costs for themselves without review."[23] Instead of subjecting the $344 million increase to an actual independent review, PG&E chose to double down on its prior practice of relying on internally-generated estimates that are insulated from outside scrutiny. It is wholly unsurprising that two PG&E employees tasked with this review would agree that the estimate is reasonable. The Commission should find PG&E's blatant disregard for the direction provided in the 2012 NDCTP to be unacceptable.

PG&E's opening brief also references additional "documentary evidence" in support of the estimate.[24] Specifically, PG&E identifies a number of changes to the study inputs described in a single page of direct testimony that are supposedly responsible for the entire $344 million increase. These changes include an average increase of 16.5% in the position classifications, the use of specific labor rates over average rates, a 15% increase in the number of personnel required during the 10-year period when the spent fuel pool is operating, an increase of 7 personnel during the dry fuel storage period, and a 4-year extension in the commencement of the pickup of spent fuel by the US DOE.[25] PG&E does not reference any efforts to estimate any savings associated with a 2 year reduction (relative to the 2012 approved estimate) in the wet fuel storage period.

As explained in TURN's opening brief, there is no basis for the Commission to find that these changes warrant a doubling of estimated security costs.[26] PG&E does not offer any calculations or comparisons that would permit a side-by-side review of the approved 2012 estimate security cost assumptions with those

[23] D.14-12-082, page 100.
[24] PG&E opening brief, page 7.
[25] PG&E opening brief, page 8.
[26] TURN opening brief, pages 27-28.

presented in this application. Moreover, there are no additional details in PG&E's testimony and workpapers.[27] As a result, it is impossible to rely on any record evidence to perform any reconciliation between the assumptions incorporated into the adopted 2012 estimate and those that cause a doubling of costs in the 2016 proposal.

The Commission should reiterate its finding from the 2012 NDCTP that PG&E has to satisfy its burden of proof when seeking significant increases in the cost estimate for a particular function. The requested increase in this application for security is more than three times the increase rejected by the Commission in D.14-12-082. PG&E's cursory effort to justify the collection of $344 million from its customers for this purpose should be denied. Furthermore, the Commission should expressly direct PG&E to make a far more robust showing in the next NDCTP if it seeks an increase of a similar magnitude.

B. Large component removal

PG&E's opening brief references changes to the assumptions governing large component removal, specifically referencing a longer expected timeline for completing the reactor pressure vessel and internals segmentation and removal.[28] There is no reference to the actual cost impact of these changed assumptions. TURN calculated the impact of these changes at $492 million, or a 77% increase relative to the 2012 approved estimate of $638 million for large component removal.[29] Had TURN not performed this calculation, the Commission would not be aware of the actual impact of these changed assumptions.

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[27] Reporter's Transcript (RT) Vol. 1, page 100.
[28] PG&E opening brief, page 9.
[29] Ex. 33, page 22, Table IV-1; These figures are the totals for costs attributable to "Period 2a – Large Component Removal" in the TLG Study (See Ex. 3, page 2-AtchA-18 through 2-AtchA-19).

PG&E claims that the increase in costs is due to an evaluation of the "staffing and timing of RPV and RPV Internals at Zion and HBPP".[30] PG&E cites timelines for the completion of this work at Zion and references its own direct testimony as the source.[31] As explained in TURN's opening brief, there is no evidence in the record to support PG&E's claims with respect to the experience at Zion apart from three lines of direct testimony and no supporting documentation to back these claims in the TLG study or PG&E's workpapers.[32] The primary basis for PG&E's factual claim relies upon information supposedly obtained by certain personnel while attending a conference.[33]

The reliance on undisclosed and ambiguous information relating to Zion is ironic in light of PG&E's emphatic assertion, elsewhere in its opening brief, that it would be inappropriate for the Commission to adopt any changes to the Diablo Canyon estimate based on "unvetted out-of-state facility estimates".[34] While TURN references public and transparent estimates for comparable activities at other similar facilities as the basis for questioning the reasonableness of costs in the Diablo Canyon estimate, PG&E relies on non-public, undisclosed, and "unvetted" information from a single out-of-state facility for purposes of proposing a $492 million increase in the estimate.

PG&E's assertions regarding the reliability of information obtained at an industry conference are contradicted by the testimony of TLG witness Seymore who pointed out the difficulty of assessing the experience at Exelon's Zion plant given the general lack of publicly available data and the need for comprehensive information to assess the impact of any delays.[35] This view was reinforced by

[30] PG&E opening brief, page 9.
[31] PG&E opening brief, page 9, footnotes 33-34.
[32] Ex. 4, page 3-10, lines 26-28.
[33] RT Vol. 1, page 101.
[34] PG&E opening brief, page 13.
[35] RT Vol. 1, pages 60-61.

TURN witness Lacy who stressed the unique nature of the decommissioning arrangement at Zion and the fact that there are many limitations on any available information from Zion that should be used to adjust the Diablo cost estimate.[36] Furthermore, TURN introduced evidence demonstrating that decommissioning estimates for other plants owned by Exelon developed during, and after, the completion of this work at Zion show no material increase in the anticipated costs of large component removal.[37] With respect to the applicability of the experience at HBPP, TURN's opening brief explains why it would be inappropriate to rely on the unique experience at that facility to estimate costs for Diablo Canyon decommissioning activities due to significant differences between the two sites, facilities, contamination levels and other factors.[38]

In prepared testimony, TURN recommended benchmarking the large component removal costs at Diablo Canyon against the recently developed TLG estimates for Exelon-owned Braidwood and Byron.[39] Since that benchmarking would lead to a reduction relative to the 2012 approved estimate, TURN simply recommends that no increases be approved for large component removal at this time. In addition, TURN urges the Commission to direct PG&E to make a more comprehensive showing in the next NDCTP that includes all available documentation relevant to other decommissioning projects that face similar challenges. The Commission should not be forced to determine whether a major cost adjustment to the estimate is justified based on the representations of a PG&E manager and incomplete information gleaned from attending an industry conference.

[36] RT Vol. 2, pages 209-210.
[37] RT Vol. 1, pages 59-60, 62-67; Ex. 20, pages 5, 7, 13.
[38] See TURN opening brief, Section IV(B)
[39] Ex. 33, pages 22-23.

C. Assumption that all clean construction debris requires out-of-state disposal

TURN's opening brief challenged PG&E's proposal to increase the overall cost estimate by approximately $312 million based on the assumption that all onsite construction debris (or "decommissioning waste") must be sent to an out-of-state landfill rather than being used as either onsite fill or sent to any in-state landfill.[40] PG&E's opening brief claims that the decision to assume out-of-state disposal for all onsite materials is the result of a review conducted after its waste disposal assumptions were "challenged" in the 2012 NDCTP.[41]

In the 2012 NDCTP, TURN "challenged" PG&E's assumption that all concrete within the reactor steel liner will be contaminated and must be treated as low-level radioactive waste.[42] The Commission agreed with TURN, declined to include $76.5 million in the estimate, and chastised PG&E for not conducting sufficient analysis to support this changed assumption.[43] The Commission did not direct PG&E to perform additional analysis on the appropriateness of disposing clean construction debris from other parts of the Diablo site at in-state landfills.

Nevertheless, PG&E claims to have recently discovered a set of costly requirements relating to Executive Order D-62-02 issued by the Governor in 2002 that change the "likelihood of in-state disposal."[44] PG&E's internal review of that executive order revealed "significant risk and uncertainty" regarding future requirements applicable to the disposal of clean (uncontaminated) concrete.[45] In light of this risk, PG&E proposes to "take a conservative position" by assuming

[40] TURN opening brief, pages 38-44.
[41] PG&E opening brief, page 13.
[42] TURN opening brief, pages 36-37.
[43] D.14-12-082, page 103.
[44] PG&E opening brief, pages 13-14.
[45] PG&E opening brief, page 14.

that all materials removed from the Diablo Canyon site that are not classified as either high-level or low-level radioactive waste must be transported to a Utah landfill for ultimate disposal.[46]

Because this "conservative position" changes key assumptions relating to the disposal of onsite materials, including 1.4 million tons of clean concrete that may be removed from the breakwater structure, the impact on overall decommissioning costs is estimated to be in excess of $312 million.[47] In past NDCTPs, the Commission has clarified the inappropriateness of using "conservative" assumptions as a strategy for systematically raising the cost estimate.[48] The Commission should again reject PG&E's continuing efforts to select the most extreme cost assumptions based on the notion that such choices represent an appropriately "conservative" approach to estimating decommissioning costs.

TURN's opening brief identifies the flaws in PG&E's interpretation of the Executive Order and subsequent orders of the State Water Resources Control Board.[49] TURN also identified five alternatives that PG&E failed to consider in reaching its determination that costly out-of-state disposal was required for all volumes of non-contaminated waste.[50] TURN does not repeat these points in this reply brief but addresses two new arguments raised in PG&E's opening brief.

First, PG&E raises a concern that future state requirements relating to the executive order could force clean (and uncontaminated) concrete disposed at an in-state landfill to be removed and sent out of state.[51] This concern, explained in

[46] PG&E opening brief, page 16.
[47] TURN opening brief, pages 40-41.
[48] TURN opening brief, pages 5-7, *citing* D.00-02-026 and D.14-12-082.
[49] TURN opening brief, pages 38-43.
[50] TURN opening brief, pages 41-43.
[51] PG&E opening brief, page 15.

PG&E's rebuttal testimony, is based upon a 1992 declaration by the US Environmental Protection Agency (EPA) designating a material processing and manufacturing facility in Colorado as a Superfund site.[52] There is extraordinarily little relevance of this 1992 EPA designation to the disputed issues in this application. Since the Colorado facility (owned by the Shattuck Chemical Company) did not operate as a landfill or accept any form of waste from other locations, there was no material shipped to the site by any nuclear facility.[53]

PG&E's reliance on this example is especially puzzling because the risk of having a landfill declared to be a Superfund site by the US EPA would apply equally to both in-state and out-of-state facilities. To the extent that an out-of-state landfill that accepts Diablo Canyon waste is ultimately declared a Superfund site by the federal government, PG&E would face the exact risk it claims to be trying to avoid by excluding in-state disposal facilities. The Commission should disregard this example as a basis for any decision to rely exclusively on out-of-state facilities to accept clean and uncontaminated concrete debris.

Second, PG&E cites the fact that the recently approved cost estimate for SONGS includes a similar assumption regarding the 2002 Executive Order.[54] Although SCE did incorporate this assumption into the most recent cost estimate, there was virtually no evidence to support or explain this new assumption in A.14-12-007 and no reference to this issue in the final Commission decision. Moreover, SCE did not identify any incremental costs caused by this changed input in either testimony or workpapers. Because the incorporation of this assumption had no identified cost impact, and in light of the fact that SCE sought a decrease for the overall cost estimate (with a $0 annual decommissioning revenue requirement to be collected from ratepayers), TURN did not believe that the issue was material

[52] Ex. 15, page 3-5.
[53] RT Vol. 1, pages 94-95.
[54] PG&E opening brief, page 17.

to the resolution of that proceeding. Had TURN successfully challenged this assumption, it would have resulted in no change to the already nonexistent revenue requirement. By contrast, the adoption of this assumption for Diablo Canyon would raise the cost estimate by more than $300 million and result in immediate rate impacts for current customers. The extreme impact of this assumption is the basis for TURN's concern and challenge in the current proceeding. Because the issue was not previously litigated, the Commission should decline to find that the requirements relating to the executive order were resolved in A.14-12-007.

PG&E has failed to support the basis for this changed assumption and failed to conduct any analysis of potential strategies for mitigating the impact of an out-of-state disposal requirement. TURN therefore urges the Commission to decline to approve this change to the cost estimate. PG&E should be directed to return in its next NDCTP with a more robust analysis of the legal requirements governing uncontaminated materials and potential strategies for mitigating the extreme cost impacts through onsite reuse of clean materials or retaining the breakwater structures.

II. SPENT NUCLEAR FUEL COOLING PERIODS

PG&E insists in its opening brief that the 10-year time estimated for transferring spent fuel to dry storage is the minimum achievable and cannot be reduced.[55] This insistence runs directly counter to PG&E's recently announced commitment to expedite the post-shutdown transfer of fuel using the 6-year timeframe at SONGS "as a benchmark for comparison".[56] Because PG&E estimates a cost reduction of $65.553 million for each year that the time of wet fuel storage is

[55] PG&E opening brief, pages 8-9.
[56] Ex. 18, page 24. (Joint Proposal submitted by PG&E in A.16-08-006)

reduced, the expediting of transfer times yields concrete and significant ratepayer savings.[57]

Despite committing to expediting the transfer of fuel in A.16-08-006, PG&E claims in this docket that it would be impossible to achieve that exact objective. The Commission should recognize the unreasonableness of PG&E making conflicting claims in concurrent active proceedings. It should be clear that PG&E's insistence on the 10-year timeline in this proceeding, in combination with the higher assumed costs of security during wet fuel storage, is driven by a commitment to inflate the overall cost estimate and increase near-term ratepayer contributions to the trust funds.

As indicated in TURN's opening brief, the 10-year timeline is at odds with the assumed duration at SONGS (6 years), Palo Verde (6 years) and the entire universe of comparison plants identified by PG&E in response to a TURN data request (5-5.5 years).[58] It is notable that SCE previously insisted that a 12-year timeline was necessary at SONGS but subsequently reduced this duration to 6 years after shutdown.[59] PG&E has not explained why the circumstances at Diablo Canyon are different from the relevant factors at SONGS and other facilities.

In the 2012 NDCTP, the Commission directed each utility to provide as part of its 2015 NDCTP application "information comparing annual cost impacts of strategies to reduce wet cooling periods."[60] While PG&E provided an estimate of cost reductions that could result from shorter transfer times, the application and testimony contain no information regarding "strategies" for expediting the process. Because there is nothing relating to such "strategies" that could achieve

[57] Ex. 2, page 2-36, Table 2-8.
[58] Ex. 18, pages 1, 4, 7, 10, 13, 18, 21.
[59] D.14-12-082, page 23; Ex. 18, page 18.
[60] D.14-12-082, Conclusion of Law 6

a shorter wet cooling period, TURN believes that PG&E has failed to meet its obligations under the 2012 decision.

PG&E's 10-year assumption is overly conservative, unrealistic, and outside of industry norms. The Commission should direct PG&E to explore all possible strategies to realize the cost savings resulting from a shorter timeline to terminating operations of the wet pools. To reflect this reality, the cost estimate should be reduced by $197 million to reflect a more appropriate 7-year cooling period for spent fuel. As an alternative, the Commission could adopt a different duration of less than 10 years to protect ratepayer interests while PG&E implements its publicly stated commitment to develop a plan for expediting the transfer of fuel to dry storage.

III. SPENT NUCLEAR FUEL MANAGEMENT COSTS

TURN's opening brief urges the Commission to adjust any ratepayer revenue requirements to include only a portion of spent fuel management costs that will be reimbursed by the federal government. Specifically, TURN offers the Commission the option of including between 5-50% of reimbursable costs.[61] This offset is designed to protect current ratepayers from being forced to pay for costs that will ultimately be reimbursed by the federal government and refunded to future PG&E customers.

PG&E offers several arguments in opposition to TURN's proposals. First, PG&E claims that no new information has become available since the 2012 NDCTP when TURN previously made a similar proposal.[62] This claim is incorrect. TURN cites substantial additional information to demonstrate that prior settlement agreements have all been extended and the federal government now forecasts

[61] TURN opening brief, pages 58-59.
[62] PG&E opening brief, pages 21-22.

liabilities of $23.7 billion or more to cover all liabilities related to the delay in pickup up spent fuel.[63]

Second, PG&E repeats the incorrect claim from the last NDCTP that reimbursement by the federal government to utilities is dependent upon future Congressional appropriations.[64] As explained in TURN's opening brief, the damage awards are made from the Department of the Treasury's Judgment Fund which does not rely upon future Congressional appropriations to issue reimbursements. The Commission should, at a minimum, correct this mistake from the last NDCTP decision.[65]

Third, PG&E asserts that future reimbursements are theoretical until actually received from the federal government and claims that it is impossible to know the amount or timing of any damage awards.[66] This claim is belied by the fact that no utility has been unable to collect these costs and PG&E expects to recover 94-98% of its actual damages from the US Government in future claims.[67] As TURN describes in its opening brief, the process has become standardized to allow regular claims to be submitted and paid.[68] The US Department of Energy explains that

> Contract holders will continue to submit annual claims for additional costs under the settlement agreements. Additional annual payments will be made pursuant to those agreements until the Government has fulfilled its spent fuel acceptance obligations.[69]

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[63] TURN opening brief, pages 52-55.
[64] PG&E opening brief, page 20, *citing* D.14-12-024, pages 35-36.
[65] Since this issue was never briefed by parties in the last NDCTP, the error appears to have come from the Commission's own misunderstanding of the relevant federal statutes governing the payment of damages from the Judgement Fund.
[66] PG&E opening brief, page 22.
[67] Ex. PG&E-14, page 10-4; Ex. 32, page 1, PG&E response to TURN DR#5, Q11.
[68] TURN opening brief, pages 50-55.
[69] Ex. 32, page 11.

Given the perfect litigation record of nuclear utilities in establishing the right to reimbursements from the federal government, and the expectation of payment by the US Department of Energy, there is little basis to doubt that PG&E will be reimbursed for the costs attributable to the delay in spent fuel pickup.

Fourth, PG&E points to increased spent fuel management costs tied to extended delays in the assumed pickup date and suggests that these costs will increase in the future if delays extend the initial pickup date past 2028.[70] TURN's opening brief noted that the federal government has acknowledged that each extension of time adds to the total liability owed to nuclear utilities.[71] Moreover, the net increase in decommissioning costs under any extension would involve new expenditures projected to occur several decades in the future. The costs associated with future delays would therefore be both fully reimbursable by the federal government and tied to forecasts of increased cost occurring in the post-2060 timeframe. Insisting on collection of these costs now, with reimbursements returned four decades later, would fail to preserve intergenerational equity.

Fifth, PG&E claims that TURN's proposal is contrary to the Commission's policy to preserve intergenerational equity. PG&E notes that the Commission's long-established policy is to ensure that future ratepayers are not burdened with costs that are incurred to serve current customers and suggests that TURN's proposal would violate this policy.[72] TURN's opening brief explains why PG&E's current approach would guarantee intergenerational *inequity* by forcing current customers to pay for costs that will ultimately be reimbursed the federal government and refunded to future customers.[73] TURN urges the Commission to protect current ratepayers from being forced to make excessive contributions that

[70] PG&E opening brief, page 22.
[71] TURN opening brief, pages 53-54.
[72] PG&E opening brief, page 23.
[73] TURN opening brief, pages 56-58.

are effectively returned to their grandchildren, none of whom received service from the facility.

PG&E further asserts that the Commission's findings in OII 86 (D.83-04-013) are relevant to the current debate. PG&E misstates both the holding of that case and the relevance to the proposals raised by TURN. In OII 86, issued prior to the enactment of the California Nuclear Facilities Decommissioning Act, the Commission considered various options for establishing dedicated nuclear decommissioning funds and directed the utilities to "make all reasonable efforts to secure tax-exempt status for their funds."[74] Because of the significant savings for current ratepayers that could be achieved, the Commission directed the utilities to "design their funds in anticipation that tax exempt treatment will ultimately be obtained."[75]

In issuing this directive, the Commission noted that no utility had ever received approval for a tax-exempt nuclear decommissioning fund, that several non-California utilities had withdrawn their requests for IRS private letter rulings based on preliminary indications that their funds would not qualify for tax exempt status, and that "we have no assurance that tax-exempt or non-recognized status is possible without federal legislation."[76] The final decision includes the following finding of fact:

> 16. Because no utility has yet received a favorable ruling from the IRS on a proposed decommissioning financing mechanism, it is unclear whether utilities can design a mechanism which would receive tax-exempt or non-recognized treatment from the IRS, under current law.[77]

[74] D.83-04-013, 1983 Cal. PUC Lexis 578, *26.
[75] PG&E opening brief, page 24.
[76] D.83-04-013, 1983 Cal. PUC Lexis 578, *27-28.
[77] D.83-04-013, Finding of Fact 16.

Despite these significant hurdles to securing tax exempt status for a decommissioning trust fund, the Commission still ordered PG&E, SCE and SDG&E to submit proposals that assumed the funds would be tax exempt.[78]

If anything, the outcome adopted by the Commission in OII 86 strongly supports the treatment proposed by TURN in this case. While the tax-exempt treatment contemplated in OII 86 had never previously been obtained by any utility, reimbursements for delays in spent fuel pickup have already been obtained by every utility filing a claim against the federal Government and there is no remaining dispute as to the long-term liability of the federal Government. While the tax-exempt treatment envisioned by the Commission in OII 86 was thought to (and ultimately did) require a future Act of Congress, the reimbursement of spent fuel damages by the federal government does not require any further action by the United States Congress and is provided under a judgement fund that is not subject to Congressional appropriations.[79] If the Commission acts consistently with OII 86, it would therefore direct the utilities to assume future recoveries of all costs attributable to the breach of contract by the federal government.

Sixth, PG&E asserts that TURN's proposal is impermissible because the proposed adjustments violate "the plain language and the underlying intent of the California Nuclear Facilities Decommissioning Act of 1985" (CNFDA).[80] In support of this claim, PG&E points to statutory provisions stating that decommissioning expenses shall be paid from the trust funds and codifying the objective that the maximum contributions to the fund should be eligible for tax

[78] D.83-04-013, 1983 Cal. PUC Lexis 578, *58, Ordering Paragraph 5.
[79] As noted in PG&E's opening brief, the subsequent enactment of Sections 468A and 172(f)(3) of the IRS Code expressly allowed the tax treatment envisioned by the Commission in OII 86.
[80] PG&E opening brief, page 9.

deductible treatment.[81] These provisions of state law pose no bar to the adoption of TURN's proposal. With respect to the goal of maximizing tax deductible contributions, the CNFDA prioritizes contributions to the qualified (tax exempt) trust funds over the nonqualified (taxable) trust funds to reduce costs to ratepayers.[82] TURN's proposal would reduce current ratepayer contributions to the qualified trusts but does not include any contributions to the nonqualified trust funds. Therefore, it would be illogical to conclude that TURN's proposal violates this provision of law.

PG&E further assumes that the decommissioning trust funds represent the only source of funds that may be used to support any activity related to decommissioning, that ratepayers are the only entities eligible to make contributions to these trust funds, and that all potential costs (even those outside the responsibility of the utility) must be included in the cost estimate for advance funding by ratepayers. PG&E unsuccessfully raised this same argument in the 2012 NDCTP and was not able to persuade the Commission to adopt its extreme interpretation of the underlying statutory provisions.

The CNFDA does not require that all expenditures related to the decommissioning process be paid via the externally managed, segregated master trusts. Pursuant to §8325(a) of the Public Utilities Code, the Commission "may establish other funds, as appropriate, for payment of decommissioning costs of nuclear facilities." Pursuant to §8325(c), the Commission is authorized to allow the utilities to "otherwise recover the revenue requirements of the nuclear facilities for purposes of making contributions into other funds established pursuant to subdivision (a)." These two subdivisions explicitly authorize the Commission to establish other mechanisms to pay for some decommissioning

[81] PG&E opening brief, page 24, *citing* Cal. Pub. Util. Code §8325(c), 8328.
[82] Cal. Pub. Util. Code §8325(c).

expenditures and permit entities other than ratepayers to contribute towards such costs.

In Advice Letter 2968-E, SCE requested disbursements of up to $214 million from the SONGS master trusts to pay for decommissioning costs incurred in 2013. With respect to employee severance costs, the advice letter stated that "SCE expressly requests the authority to propose a different means to recover the severance expenses incurred in decommissioning, if payment from the decommissioning trust would compromise the beneficial tax status of the trusts or if another cost-recovery alternative is appropriate."[83] SCE's request for the use of "another cost-recovery alternative" contradicts PG&E's theory that no other alternatives are permissible under the CNFDA.

The Commission should decline to uphold PG&E's various objections to the treatment of future federal reimbursements. The amount of money at stake is significant and, left unchecked, would result in an unprecedented transfer of wealth from current ratepayers to future ratepayers. TURN offers the Commission a chance to incorporate small amounts of future reimbursements at this time with the opportunity to increase the percentage in a future proceeding as confidence is gained in the certainty of the process. By endorsing this approach, the Commission can take meaningful steps to minimize the intergenerational *inequities* caused by PG&E's approach.

IV. PG&E IGNORED SEVERAL ENHANCED REPORTING REQUIREMENTS ADOPTED IN PRIOR CASES

PG&E asserts that it has complied with all prior Commission decisions.[84] This assertion is incorrect and misleading because, as explained in TURN's opening

[83] SCE Advice Letter 2968-E, page 4. [emphasis added]
[84] PG&E opening brief, pages 38-39.

brief, PG&E failed to comply with several enhanced reporting requirements adopted in both the 2009 and 2012 NDCTPs.[85] The key omissions relate to the failure to include a comparison of Diablo Canyon assumptions to those used for the SONGS cost estimate, the absence of information relating to the enhanced categories of reporting proposed by TURN for the Common Summary Format, and the obligation to include a comparison between the current DCE and the estimates from the two previous NDCTPs.[86] The fact that PG&E does not mention these requirements in its opening brief indicates the lack of seriousness applied to following guidance from prior decisions.

TURN reiterates its recommendation that the Commission require PG&E to provide more comprehensive information in the Common Summary Format, to coordinate with SCE to ensure that information for SONGS, Diablo Canyon and Palo Verde are included in the Common Summary Format, and to include a comparison of the current DCE to the two previously approved cost estimates.

V. CONCLUSION

For the reasons described in the foregoing sections, TURN urges the Commission to adopt the findings and recommendations identified in its opening and reply briefs.

[85] TURN opening brief, pages 66-68.
[86] TURN opening brief, pages 66-68; D. 14-12-082, pages 41-42, 108.

Respectfully submitted,

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Dated: October 31, 2016